REMARKS/ARGUMENTS

Claims 2-25 stand in the present application, claims 10, 22 and 23 having been amended. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

Before turning to the Office Action, Applicants wish to note that the Examiner's designation of this Office Action as a final Office Action is improper and respectfully requests that it be withdrawn. In particular, the Examiner has twice examined the present application (since the filing of an RCE) and rejected claims over cited references. However, at no time have the Applicants had to amend the claims in order to overcome the Examiner's two previous rejections. Accordingly, it is improper for the Examiner to say at page 9 of the Office Action that "Applicants' amendment necessitated the new grounds of rejection presented in this Office Action. More particularly, in the Office Action dated December 29, 2005 (which was issued after the filing of the RCE on October 5, 2005), the Examiner rejected claims 2-25 as being anticipated by Combs et al. However, in a responsive filing on May 1, 2006, Applicants successfully argued that Combs et al. had been misapplied against claims 2-25 in that the cited reference did not anticipate any of these claims without any substantive amendments of the claims to overcome the anticipatory rejection. Thereafter in another "final" Office Action dated June 30, 2006, the Examiner rejected claims 2-25 as being anticipated by Downs et al. However, in a responsive paper filed on October 23, 2006, Applicants successfully argued that Downs et al. had been misapplied as an anticipatory reference against the present claims. Hence, since the filing of the RCE Applicants have not had to substantively amend any of the claims in order to overcome

- 10 -

the Examiner's anticipatory rejections based on Combs and Downs et al. which have

been withdrawn by the Examiner now in favor of a rejection based on Boyles.

Accordingly, it is respectfully requested that Applicants should be allowed to amend the

claims as described above and that these claim amendments should be entered into the

case and considered on the merits in that the present Office Action should not have

been designated as "final."

As discussed above, the Examiner has rejected claims 2-25 under 35 U.S.C.

§ 102(b) as being anticipated by Boyles et al. Applicants respectfully traverse the

Examiner's § 102 rejection of the claims.

Boyles does not teach or suggest anything equivalent to the resource locator of

the present invention which "advertises" its resources to other resources locators in an

unprompted manner.

Boyles states at col. 4, line 59 to col. 5, line 3:

> A third type of node ....is a cache server mode which, ...
> constitutes a network node capable of performing normal
> network node functions but which is also additionally
> obligated to build and maintain a large cache of directory
> entries, to act as a focal point for cached resource location
> data and to service LOCATE requests *received* from other
> nodes in the network. By assuming a primary role in locating
> resources and then caching the results, a cache server node
> prevents redundant network-wide broadcasts of LOCATE
> requests. (Emphasis added)

Col. 5, lines 4 to 10 of Boyles then goes on to state that:

> A cache server node preferably includes a local directory for
> storing resource records for resources directly "owned" by
> the cache server node, a domain directory for storing
> resource records for resources owned by nodes served by
> (or in the domain of) the cache server node, and a cross-
> domain directory for storing resource records for resources

- 11 -

located in the network but outside the local domain.

Thus it is clear that Boyles et al describe a cache server having functionality more similar to the locally cached copy of the resource broker (shown in Figure 11 of the present application as "LBC") rather than a "Resource Locator" according to the present invention which implements an "advertising" function as well as generating requests.

This is a crucial difference – according to the Applicants' invention each resource locator "provides" information **unprompted** to other resource locators (either directly or indirectly via a resource broker) about its own sub-system i.e., resources are **advertised** by a resource locator according to the invention (see for example, see page 1, lines 27 to 28 and page 5, lines 11 to 13 of the present application) – it does not wait until requested to provide this information.   In contrast, in Boyles, it is made very clear that each origin cache server has to locate resources by performing a series of database searches before "requesting information" from other resource locators in a series of searches. Thus the Applicants' invention differs fundamentally and patentably from that described by Boyles.

It is clear from col. 5, lines 31 to 34 that Boyles defines what is meant by an "origin" cache server...a cache server node that receives a LOCATE request ...from one of its own resources or from a resource served by a node within the cache server node's domain. Col. 5, lines 47 to 52 of Boyles clearly describe how an origin cache server initially performs a series of directory searches to locate a resource (See in particular operation 58, col. 5, lines 47 to 48).   If the requested resource is not a local resource, the search is extended to the domain directory maintained at the origin cache server node. If not, then the search is extended to a cross-domain directory maintained

- 12 -

by the origin cache server node. After this, if the directory searches do not locate the requested resource, the origin cache server node broadcasts the LOCATE request to resources within its own domain in an operation **60** (see col. 5, lines 53 to 57). If the requested resource is not found in operation 60, the origin cache server node directs the LOCATE request to other cache server nodes in the network in an operation **62** (see col. 5, lines 60 to 62). If the locate request is not satisfied in operation 62, then the origin cache server broadcasts a LOCATE request to all network nodes in the network in an operation 64, if this is not successful, then the LOCATE request is directed in an operation **66** to a selected gateway node (col. 6, lines 33 to 35).

A huge amount of communications over-head is thus required to implement the scheme of Boyles et al., as searches of searches and then broadcast operations must be performed and, in addition to this, the information stored may become out of date. Applicants' invention does not require a series of searches to be performed – instead, each "resource locator" knows where appropriate resources are to be found as it has received appropriate information <u>advertised</u> either directly by the relevant resource locator of the subsystem with the required resource or it received the information from a resource broker (which received the information advertised by the relevant resource locator of the subsystem with the required resource).

So in summary, according to the invention, each locator advertises to all other locators, the identity and location of the sub-system, the resources available at that location and, for example, the loading of the resources. (See present application at page 5, lines 11 to 13). This makes the system of the invention much more scalable

and quicker to implement and enables up to date information relating to the current prevailing conditions (such as loading of the resources) to be advertised.
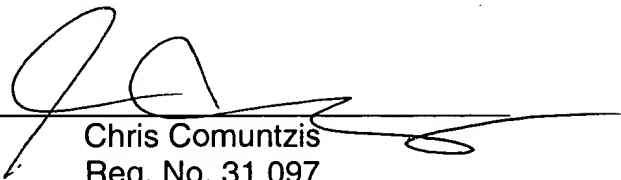
Claims 10, 22, and 23 have been amended to emphasize this "advertising" feature of Applicants' invention.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 2-25, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

Respectfully submitted,

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